DOCUMENT RESUME

ED 039 675 EC 005 702

AUTHOR	Brinning, Dorothy; And Others
TITLE	Activities for a Perceptual Motor Program.
INSTITUTION	Moore (A. Harry) Laboratory School, Jersey City, N. J.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C. Bureau of Elementary and Secondary Education.
PUB DATE	69
NOTE	41p.
EDRS PRICE	EDRS Price MF-$0.25 HC-$2.15
DESCRIPTORS	Curriculum Guides, *Exceptional Child Education, *Learning Activities, Motor Development, Perception, *Perceptual Motor Coordination, *Physically Handicapped, Psychomotor Skills

ABSTRACT

Perceptual motor activities for physically handicapped children are presented in the areas of fine and gross motor skills. Also detailed are activities to develop body image, visual motor skills, and tactile and auditory perception. (JD)

EDO 39675

Activities

for a Perceptual Motor Program

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ACTIVITIES FOR A PERCEPTUAL MOTOR PROGRAM

Developed at
A. Harry Moore School
Jersey City, N. J.

by

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Under a grant from
Public Law 89-10
Elementary and Secondary
Education Act of 1965

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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FOREWORD

This booklet has been designed for the children of the A. Harry Moore Laboratory School for the physically handicapped. It is hoped that activities adapted to their abilities will assist in the improvement of areas of perceptual deficiency. It would be unrealistic to anticipate achievement in some areas because of their physical disabilities.

The uniqueness of this program is its integration into all areas of school life. In this manner, the child should receive unified reinforced training throughout his school day.

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INTRODUCTION

It is generally accepted that the child's first learning experiences are motoric. He learns about his environment by experiencing it physically. All future learnings appear to be an outgrowth of these early physical experiences. All early training therefore, should be oriented toward developing to the highest possible degree the child's motor efficiency.

Many handicapped children are denied the opportunity to experience their world physically. The basis of this perceptual-motor development program is to provide the missing sensory-motor experiences to the fullest extent possible. The ultimate goal is to enable the child to function at his most efficient level of performance - academically, socially and emotionally.

The following is a program of suggested activities to help develop each of the sensory-motor areas. Although the child learns most efficiently when all senses are utilized, we are aware that many avenues of learning will be closed to some of the children in this program. It is the challenge of the teacher to facilitate the development of the child's strengths and assets.

GROSS MOTOR DEVELOPMENT

The needs of the handicapped child for a strong program of gross motor activities must be recognized. Through the following suggested activities which will be adapted to the needs of the individual child, he would have an opportunity for greater perceptual-motor development.

In the selection of activities, the teacher should keep the following points in mind; do not permit the activity to aggravate an existing condition, make activities appropriate to the age level of the child to insure his interest, select activities which will have lasting recreational values when possible, approximate those activities used in the normal physical education classes.

Though these are the activities which will be conducted in Physical Education, it is felt that the teacher would derive value from knowing how perceptual-motor development will be promoted in that setting. In addition, several of these activities can be carried over into the classroom.

Gross Motor Activities as Conducted in Physical Education

General Coordination

Non-Locomotor Activities (do not move from place to place)

- twisting
- bending
- rotating trunk, arms
- head movements

Locomotor Activities (moving from place to place)

- crawling, rolling
- walking
- running
- hopping
- jumping (2 feet together)
- skipping
- galloping

Eye-hand Coordination Activities

- throwing
- striking
- kicking

Balancing Activities

- without apparatus
  - in place
  - using lines
- with apparatus
  - beams
  - balance boards

Self-testing Activities Activities done individually by the child who is competing only with himself. It is a test of his own performance.

Music and Rhythmic Activities (with a slow tempo)
- singing games
- simple dances

Story Plays

Simple Marching

Games of Low Organization
- "Ring Around the Rosy"
- "Farmer in the Dell"

Simple Relays

Suggested Gross Motor Activities for the Classroom

Bean bag toss (ball, eraser)
Balloon volley ball
"Simon Sez"
"Pin the Tail"
Imitate movements
Follow the leader (around furniture and other obstacles using the words "around", "over", "under", etc.)
Imitate rhythmic patterns
Mimetics (imitative activities)
Use records
Finger painting
Bowling

BODY IMAGE

The body must be the focal point for any consistent spatial orientation. Body image training aids the child in locating himself with relation to his environment and is the basis of perceptual-motor development.

Essential to this concept of body image is the reinforcement offered by the sense of kinesthesia which is the sum total of information derived from motion and position. Kinesthetic sense relates parts of the body to each other and is necessary to the development of motor memory.

An early development of body image is the concept of laterality which is the internalized awareness of right and left. The sense of right and left as projected into space (directionality) is the immediate goal. Crossing the mid-line of the body without becoming disorganized is also essential to effective functioning.

There should be an awareness that the role of body image is apparent in most classroom activities. The activities suggested are not necessarily in sequential order nor are they all inclusive. Successful completion of one activity is not necessary for progression to another activity.

Body part activities - It is helpful when working with Body Image activities to indicate right or left side visually (e.g. rubber band on one wrist, decal or ink stamp on back of one hand.) Use or directional words such as "up", "over" is also useful.

Balance
- Walking a straight line
- Stepping stones
- Balancing objects on head

Modified walking
- Duck walk
- Elephant walk
- Shoe box walking

Imitating movements
- "Simon Sez"
- Follow the leader

Rhythm activities
- "Looby Loo"
- "Hokey Pokey"
- "What's This?"
- "Head, Shoulders, Knees, and Toes"
- "When You're Happy and You Know It, Clap Your Hands"

Identification

Use word association and tactile awareness of body parts (slap or pinch part being identified)
Identify parts on another person
Pin parts on Snowman
Silhouettes
Sort paper feet and hand outlines into left and right
Wash and dress doll (Describe part of doll being used.)
Trace, color, label, and cut-out (Use for transfer of identification of body parts.)
Complete partly drawn figures
Complete flannel board, magnetic board, and color form figures.
* Give child a diagram of geometric shapes forming person.
Build blocks over paper diagram
Superimpose paper cut-outs on diagram
Color in paper cut-outs
Assemble parts to form diagram, first with model then without model
Draw figure while it is shown, then draw from memory
Finger localization - Ditto right and left hand outlines. Give directions such as "Put an X on the left thumb, etc."

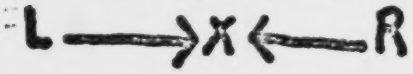
**Finger plays

Chalkboard work - Initially, encourage the child to work freely. He should stand at arm's length from the chalk board. Encourage free flowing scribble. Finger painting can be used as an alternate activity. The child can then progress to more structured activities such as the following:

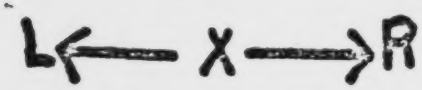
The teacher places a dot on the board. The child places his chalk on the dot. The teacher then makes a second dot at random. Child connects the two dots. Child stops at each dot and waits for directions to move to the next dot. Distance is increased between dots from small area to a point at which the child crosses his mid-line. Child should avoid pivoting or walking. If necessary, call attention to the dots by verbal clues, "hit the dot."

*See appendix A
**See appendix BCDE

The child connects dots in horizontal directions. He must move both hands simultaneously, reaching designated mark on chalkboard. Repeat activity using vertical and diagonal directions.

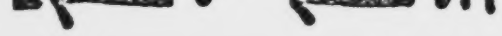


Move away from mark in various directions.



Move both hands in parallel direction from left to right with one hand starting left of the other.

Reverse from right to left with one hand starting farther right.

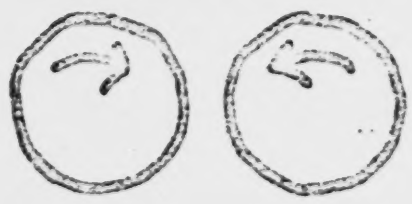


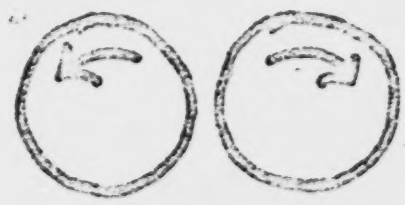
Starting from two points, the child moves hands toward center simultaneously, one hand moving in vertical direction and the other in horizontal direction.

Start at center and move back to original position simultaneously.

Draw circles with one hand at a time in both clock-wise and counter clock-wise directions.

Progress to drawing circles with both hands simultaneously in opposite directions.





TACTILE PERCEPTION

Tactile perception is the ability to identify textures and objects by touch. This skill is the apparent basis for all future visual learning and should be given careful consideration.

It should be kept in mind that the written word (e.g."hot", "damp", "soft") can be presented to the child who is learning to read. It is important to use words consistently when first introducing a texture and then progress to synonyms.

Awareness - The following descriptive words: hard-soft, rough-smooth are used first to teach the child the qualities of textures.

Form and Shape

Tactile perception of form outline by indentation or embossed processes has been found to be easier than the perception of solid geometric forms. This is in keeping with Piaget's topological-primacy hypothesis. For this reason the following sequence of form and shape training is suggested:

Start with geometric form outlines and progress to outline of shapes and symbols. Ask child to identify geometric forms using raised or indented materials.

- Match sticks
- Clay snakes
- Felt outlines
- Sandpaper outlines
- Embossed alphabet
- Glue sprinkled with sand
- Outlines formed with pinholes
- Indented clay outlines (use stylus)
- Pattern learning forms

Progress to the use of three dimensional materials.

- Blocks of varying shapes and sizes
- Texture blocks
- Everyday objects
- Coordination board
- Mor-Play Kinesthetic Alphabet

Texture

Textures of a gross nature are used first. Many of these ideas can be incorporated into classroom activities. The child is asked to identify texture - first with vision then with vision occluded.

Use everyday objects such as blocks, cotton balls, sponges, sandpaper, glass, table tops.

Clothing textures such as leather, corduroy and nylon.

Texture blocks, "Feel and Match" texture discs

Mystery bag
Teacher acquaints child with samples of various textures and their names. Samples are placed in a bag. Child selects texture by touch and names it.

Gradations (suggesting varying degrees of rough and smooth)
leather - pig skin, patent, alligator
sandpaper - fine to extra rough

Consistency

Identify by touch only: sand, flour, paste, water.
A further refinement can be developed by mixing water and sand or water and flour

Masking tape demonstrates stickiness. Show child how it will pick up lint, etc.

Glue and paste
Sticky candy
Chewing gum
Gummed stars and paper

Discrimination

Place variety of objects in front of the child and then ask him to sort from left to right according to similarities (all hard objects on the left, all soft objects on right).

Progress to grading and sequencing according to degrees and size from hardest to softest, biggest to smallest, lightest to heaviest and hottest to coldest.

With vision occluded, sort "all circles," "all spoons," "all cold things".

Ask child with vision occluded to identify something placed in his hand.

Ask child to give another child something hard, spongy, etc.

Have child match object he can't see but can feel with another object in a group which he can see.

Memory

Ask child to describe something that is soft-furry.

Ask child to name several things that are sticky, cold, etc.

Ask child to locate object from verbal description (e.g. "Find something that is soft and spongy.")

FINE MOTOR DEVELOPMENT

The classroom teacher will find unlimited opportunities to incorporate fine motor activities into the school program. The following activities are suggested for developing specific fine motor movements. These activities can not be limited to just one area of development. As an example: bean bag toss incorporates gross motor (shoulder and elbow motion), fine motor (grasp and release) and eye-hand coordination. At all times adapt to the needs of the child.

Fine Motor Activities

Pre-writing skills

1. Scribble, using crayons and large size paper. Encourage gross, free motions.
2. Color in template (the cut-out part of template) (tape down if necessary).
3. Draw around inside frame of template.
4. Draw outline of template insert.
5. Draw around dotted lined geometric form then color in.
6. Forms used for coloring should become progressively smaller and increasingly complex.
7. Trace forms and shapes using tracing paper or plastic sheets.
8. Dot-to-dot pictures. As a further progression use dot-to-dot number and letter pictures.
9. Form numbers and letters using dotted outlines.
10. Chalkboard work (with child who is physically able this activity can be carried on at the same developmental level as crayoning.) Use the same sequence as with coloring.

    An adaptation for hemiplegics would be to project item to be traced (use the slide attachment of a filmstrip projector or an overhead projector) on black board.

11. Copying. When child can trace the forms using the templates, have him copy single forms. Then move to designs combining forms and shapes and finally move to letters.

When the kinesthetic sense is required as a method of teaching, the following activities may be used:

Clay and stylus for drawing shapes, forms, letters and numbers.

Sand paper forms, shapes, letters and numbers.

Drawing designs in sand.
Clay snakes to form shapes and symbols.
Crayon over paper which covers sandpaper letter. The image will appear on the paper and will have a definite texture.

Cutting Sequence

1. Fringe - encourage left to right progression.
2. Cut off corners.
3. Cut along straight line (paper held vertically).
4. Cut along curved lines.
5. Cut around simple shapes.

Placing and Pasting

Placing exercises preceed pasting. When the child can place shapes accurately, then he is ready to paste them down. The following motor sequence is suggested for this activity:

Cutting out a piece of paper
Putting paste on it
Reversing it
Pasting it down

One Hand Operations (Flexion - extension)

Shaking rattle, maracas, coconut, rhythm instruments
Up and down movement - painting, paper folding, hammering, pounding bench
Horizontal movement - abacus
Throwing - beanbag, erasers, balls
Grasping - clip clothes pins, picking up pegs, beads, blocks.
Wrist movement - paper fan

One Hand Operations (Alternating hands when possible)

Squeezing-bicycle horn, rubber balls, yarn balls, clay, play doh, plasticene
Pressing - Stapling, pasting
Twirling - tops, jar lids, jacks

Two Hand Operations (If Possible)

Catching and throwing
Winding - toys, wind thread on a spool
Drumming - alternate hands
Using a rolling pin
Turning handle - music box
Screwing - bolt and nut
Stringing beads
* Finger plays

* see appendix B C D E

The following toys and games are a further extension of the operations mentioned previously:

Dealing and holding cards
Building Blocks
Color cones
Post office box
Marble boards
Puzzles
Tiddly winks
Lotto
Checkers
Mosaics and tiles
Jacks
Bingo
Paper weaving
Snap-it toys
Sorting and matching colors, shapes, sizes, etc.
Pick-up sticks
Paper folding
Magnetic form board
Felt board
Painting (tempera, finger, water)
Sewing cards
Buttoning
Lacing
Tying ribbons and laces
Opening and closing snaps and zippers

VISUAL-MOTOR PERCEPTION

It has been stated that a major percent of everything we learn is learned visually. The accumulated knowledge of our culture is available to the individual who is able to decipher the forms and symbols used to convey this information.

Obviously, the skills necessary for efficiently perceiving and adequately interpreting our visual environment are of the utmost importance and must be developed to the ability to differentiate fine detail in visual stimuli.

Visual Discrimination

Color - Color cues may be used for teaching shapes, but then should be eliminated.

Start with only 2-3 colors for child to select from (depending on his ability). Start with red, yellow, blue-green.

Use matching and sorting activities (same and different etc.)
Peg boards
Blocks
Crayons
Color macaroni and sort as to color
Color dominoes
Marbles
Paper and crayon activities

Form, Shape and Symbols - Concept of geometric forms is an earlier development than the concept of symbols.

Use matching-and-sorting and same-and-different activities
Match same form and color (red circle with other red circles)
Match same form with different colors (red, yellow, blue)
Geometric form boards
Flannel board
Sifo puzzles (directional differences)
Configuration cards
Magic cards
Color forms
Teacher Resource cards (association cards)
Frostig Worksheets PC42-51, 61
Match same letters and numbers
Object Lotto
Ben-G plaques
Perception plaques (moon, clown)

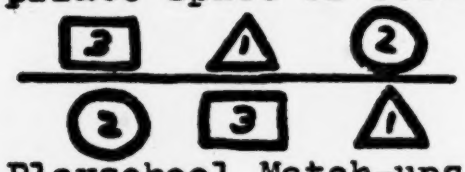
Match same letters and numbers at first with color
then later in black and white
"Find the one that is different" - A A a A
"Find A/ B A C the one that is the same as
the first"
Progress to word likenesses and differences
Continental Press (1-6; 7-12; 17-21 - Level II)
Concentration, Old Maid

Size and Quantity - Size includes concepts of big-little; long-short; high-low; tall-short; more-less. The progression of development is from the use of concrete objects to paper and pencil activities.

Color cones
Coordination board
Learning Tower
Kittie in the Keg
Sifo puzzles
Montessori cylinders
Sort objects according to size
Arrange objects such as strips of paper, straws, pencils in ascending or descending order.
Use class - "Who is the tallest?" "Who is the shortest?" "Line up according to size."
Liquid measures
measuring cups, cartons of varying size
Ruler
Use of money (at this point the value is not important,)emphasize size "Which is the biggest?"

Visual Reasoning, the ultimate goal in perceptual development, is the adequate interpretation of our visual environment. It is the translation of what is seen into what is understood.

Copying designs, using blocks, parquetry blocks, pegs, placing pattern on index cards (place colored blocks on similar colored squares)
Duplicate bead patterns
Missing parts lotto (Teacher-made worksheets)
Classification - categorize groups of pictures such as all the animals, toys, etc.
Matching printed forms on cards (association cards) to small objects or pictures (Teaching Resource cards)
Puzzles
Tic-tac-toe
*Coding activity - transfer designated symbol to appropriate space or form

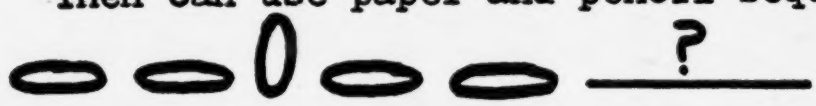


Playschool Match-ups
Go-together Lotto
Sequencing
    Pictures in sequence
        See-quees (Frog, flower, butterfly)
        Arrange pictures of seasons in order
        Arrange cartoon (no words)

Frostig SR51-53
Bead and block patterns - ask child to complete or "What comes next?"

1 red, 1 green, 1 red ___?___

Then can use paper and pencil sequential designs



Letters, numbers, short words in consecutive order
Arrange alphabet blocks in order
Put jumbled words in order
Arrange words to form sentences describing pictures
Supply missing word to complete sentence or story
Arrange days of week in order (from scrambled word cards)
Arrange months in order (from scrambled word cards)

* see appendix F

Visual Memory - For effective learning, the individual must be able to retain and recall what he has seen both immediately and long range.

Place several familiar objects on the table. Have the child point and name each object as he looks at it. Then he turns away and names as many objects as he can remember. Start with three objects and gradually increase the number. When child is able he can list with paper and pencil the objects he remembers.

Line up a series of objects, pictures or toys. Tell the child to look at them carefully. Then while he closes his eyes, shift the order of one object. Child is to replace it in correct order. Later shift two or three objects.

What's Missing? - Several objects are named and placed on the table. The child looks at them for several seconds. Then one object is removed. The child names the missing object. The number of objects removed can gradually be increased.

Where is it? - Have child close his eyes and point to various people and objects in the room as they are named.

Describe something and have the child name it from your description.

Ask the child to get something in the room after he describes exactly where it is without pointing.

Expose a geometric form (later a simple drawing). Remove and ask child to draw it from memory. It is important for child to close eyes for a few seconds following exposure.

Describe your room at home
Match solid figure to outline
Fit word into proper configuration form
Supply missing letter to sight words
Expose word on card for 15 seconds; select correct word from several.
Tachistoscopic presentation of pictures, letters, digits, words.
Show child card containing 3 words of varying length. Flash one word on screen. Mark one on card which is similar. Refine differences progressively.
Concentration card game.
"Ghost" - supply missing letters to words.

Spatial Relations - For our purposes, this can be defined as the relationship of objects in space to ones own body. The development of the concepts, figure-ground and parts of a whole, represents the two most important areas with regard to reading readiness.

Figure-Ground Differentiation

The activities listed under Visual Discrimination - form and color matching, cut and paste may be used here. In addition the following are suggested:

Peg Board activities
- Copy peg board designs progressing from horizontal to vertical and lastly to diagonal lines.
- Progress to cross, using two colors, then one.
- Copying square, triangle, diamond
- First form solid design of pegs, then only outline.
- *Copy Gestalt type outlines
  - one color
  - multi-color

Form clay outline over crayon or pencil outline of geometric forms
Build match-stick outline over crayon or magic marker outline
Copy simple forms
Color cone
Toy postal box with vari-shaped slots
Geometric form boards
Simple puzzles
Parquetry blocks (varied shape designs)
Copy color cube designs
- Begin with square red and white blocks (any 2 colors then vary colors.

Fit drawings to outlines
Fit-a-space
Woodies
Tile designs
Petal designs

Whole-Part

Teacher Resource whole-part puzzles. These can also be made when necessary by cutting simple geometric forms and pictures into two parts as child watches. Progress to cutting pictures into more parts and to using more complicated pictures.

Puzzles; selected Ben G puzzles
Flannel board activities
Color forms
Fractional parts
- liquid measures (dry measures)
- ruler
- 2 nickels equal 1 dime

*see appendix G

fractional square board
rooms of doll house
parts of a building
parts of a class
parts of a car
cities make a state, states make a country
letters in a word
models

Parts from whole - identify parts of self using word association and tactile awareness of body parts (slap or pinch part being identified)

Identify parts on a another person

Ocular Movements - Must watch for fatigue. Training in this area should not exceed 10 minutes.

Tracking and Pursuit

Activities used to help train in tracking and pursuit are listed below:

Thumb tack on pencil
Hold pencil 20" from face of child and ask him to follow "with your eyes, keeping your head still."
1) move pencil left to right
2) move pencil up and down
3) move pencil in rotary motion

Chalkboard
By incorporating gross motions (using chalk at black-board rather than pencil and paper) the teacher is able to use the kinesthetic sense as reinforcement.

1) Scribble - with no restrictions using as big an area as his arms can stretch. Do not allow child to move feet, for this would enable him to avoid crossing the midline. Can add rhythm to this activity as it will help eliminate jerky movements. Children confined to desks can use finger paint or paper and pencil to accomplish similar aim.

2) Have child place chalk on board. Teacher makes a dot (to the right of child). Child draws line to teacher's dot. Can continue along following dot to dot. As this develops, do not allow child to move body so as to encourage crossing the midline.

3) Template training at chalkboard encourages ocular movements.

a) Use circle first (center being at level of child's nose). Instruct child to "start at top and go around to the right, to bottom, and around to top. Stop. But do not lift chalk." Do this 10 times.

b) Square - again with center at eye level, start in upper left hand corner "over, down, across, and up. Stop. Do not lift chalk." 10 times.

c) Triangle

c) Diamond

After each lesson (i.e. circle) remove template and have child trace the circle, then draw one free hand.

As a further development have child use both hands at the same time to draw two forms simultaneously.

Use a ring-shaped gelatin mold and ping-pong ball. Hold the mold with the ball and tilt it so the ball rolls around it. Have child follow movement without moving head. Direction of ball can be reversed.

Can also use mazes for this training.

Left to right progression - The development of all reading skills is dependent on left to right progression. Training for left-right progression needs to be started early and continued in every activity until well established. The goal is freedom of eye movement without head movement.

Techniques

Color cues are helpful in paper work. Mask left side with green and right side with red. (This reinforces concept of stop and go.)

Using paper geometric forms or blocks, have child reproduce design going from left to right.

Peg board or marble board can be used. Fill in line going from left to right.

Dot-to-dot designs moving from left to right (to increase complexity use lettered or numbered dots.)

Finger jumps for left-right progression.
Hold your two fists directly in front of you with the thumb erect and nails showing.

Look at your left thumb, then look at your right thumb - do not move your head - move only your eyes.

Standing five feet in front of the child, move an object (i.e., a car) or roll a ball or move a bead along a string and have child follow the movement of the object from left to right without moving his head.

Chalkboard work can also be used in left-right training (connect Xs, etc.)

Work sheets in which the child, moving from left to right, is required to underline or circle all the same letters or shapes.

Paste gum stickers from left to right.

Screw board - using screw driver, tighten screws from left to right.

Frostig worksheets.
VM 11-20; VM 21-30; VM 31-34.

Sequential pictures.

AUDITORY PERCEPTION

Auditory Perception is training in listening and interpreting sound or speech. This training should be done in connection with responses.

Awareness

Gross Sound

The child should be aware of the presence and absence of sound and should respond to the cessation of sound.

TV - on and off
Radio - on and off
Pencil sharpener

Use instruments of different pitch such as bell, drum, whistle, horn, telephone, toy piano. Child experiments with sound of instrument and is taught to respond motorically when teacher produces the sound. Give child opportunity to manipulate object. Make sure he can experience making the sound himself and if possible start and stop it. Watch for consistency in response. Child first watches, then works with vision occluded (i.e. with back turned). When teacher makes the sound, purpose is not to identify nature of sound but rather indicate that a sound had been heard.

Fine Sounds

Wooden beads dropped into a tin
Small glass beads dropped into a jar
Pebbles in a box
Squeak of a rubber animal
Jangling of coins

Voice Sounds

Teacher makes sound such as "m." With vision occluded child should give some awareness that he has heard the sound. As a further development he can try to imitate the sound.

Speech Sounds

Child should respond to simple language such as "Show me your hand." Child should respond motorically.

Localization - In addition to understanding sounds, a child must be able to localize them, for only when the general source of a sound is known can one react appropriately. The child should be encouraged to respond consistently.

"Hide and Seek" games - Teacher shows the child a toy such as a bell, then she hides and rings the bell. The child is encouraged to find the sound. This can also be done with a set alarm clock, metronome or arch goal locater.

Teacher rings a bell on the right side of child with vision occluded and have him turn toward the sound. Make this task more complex by moving to different positions in the room and presenting the sounds from various directions.

"Follow the Sound." Blow a whistle while walking around the room and have the child follow with his body (if possible) with vision occluded.

Children sit in a circle, eyes closed. Teacher designates one child to clap his hands, ring a bell, etc. One child is designated to identify source of sound.

Discrimination

Select a noisemaker. Have child gain experience with sound of each object, then stand behind child with an identical set of objects. Make a sound and see if the child can point to the correct object. As the child progresses, select sounds more closely alike and increase the number of sounds. Continue the exercises with variations to assure the necessary motivation and enjoyment.

Record a series of common, everyday sounds. Then place three or four pictures in front of the child and play one of the sounds. The child is to identify picture associated with sound. "Sounds I Can Hear" - Scott Foresman. (City, farm, neighborhood, house.)

Sound instruments are used in training for discrimination of pitch, intensity and tempo. First the child is alerted to the high or low notes. Then with his back to the stimuli, the child responds to high or low notes or chords by making a mark at the top (for high) or at the bottom (for low) on a piece of paper or responds in some other manner.

Discrimination of pitch may also be trained by teaching the child to strike high or low notes on an instrument in imitation of sounds made by the teacher on a corresponding instrument.

A child can be trained to respond to loud or soft sounds by marking on a chart long strokes for loud sounds and short strokes for soft sounds.

The child may also respond to intensity changes by imitating on his own instrument.

The child may respond to tempo by imitating on his own instrument.

Introduce appropriate response to sounds which are important for self protection (i.e. fire drill buzzer, fire whistle)

Imitate sound identical to one made behind him (use two bells, etc.)

Have the child close his eyes. Tap on the wall, radiator, blackboard, etc. Ask the child to tell you what was tapped.

Teacher bounces ball and child tells how many times it was bounced.

Ask child to close his eyes. Have one child speak and ask the others to tell who has spoken.

Have child close his eyes and listen to the sounds inside and outside the classroom. Then have him identify the sounds he heard. (This is auditory figure-ground training.)

Blindfold child; make sounds (i.e. jingle keys, crumple paper, turn on water faucet, strike piano key, rap on table, open zipper). Child must identify sound.

Imitate rhythmic patterns; melody recognition.

Initial Sounds

"Listen carefully. I am going to say a word. You say any word that begins with the same sound." Give several examples such as: lady, lake, line, look, etc.

Use child's name. "Listen to the sound that begins Mike's name -- Mike. Can you think of any other child's name that begins with this sound?"

Use pictures. Cut small pictures from magazines or catalogs and paste them on a blank sheet of paper. Child selects and names those which begin with the same sound.

Child can also group objects which begin with the same sound.

"Alike or not alike." "I will say several words. If all the words begin with the same sound, fold your hands. If they do not begin with the same sound raise your hand." The method used to indicate same or different can be varied according to the child.

When the child knows the names of the letters, give the child a set of letters. Then say to the child "here are some words -- sand, soft and sister. Show me the letter and say the sound with which these words begin."

Give the child an envelope containing pictures and have him sort the pictures according to initial sounds. This can also be done with rhyming endings and final sounds.

Rhyming Sounds

The same procedure that is used with initial sounds may be used with rhyming sounds.

Words may be printed on chalkboard to emphasize the visual likeness.

Child should be able to say and hear sounds being taught to insure use of auditory facility.

Teacher Resources See and Say Puzzles are useful for providing visual clues in addition to auditory training.

Oral rhyming -- the teacher supplies the first line of a jingle or poem and the beginning of the next, leaving out the rhyming word. The child is asked to supply the missing word.

Rhyme game -- the teacher asks for the word that rhymes with another. First begin with a verbal clue such as, "I am thinking of something that lives in water and rhymes with dish." Later the verbal clues may be eliminated.

Continental Press sheets -- rhyming I and II can be used for additional reinforcement.

Final Sounds

Three or four words are pronounced by the teacher, all but one of which end like the first word pronounced (pen, been, plan, peach). The child repeats the one that is different.

Teacher names word ending with specific consonant, or presents a picture and names it. Child offers other words ending with the same sound.

"Go Fish." Strings are tied to letter cards. Child pulls letter and gives word ending in that letter.

Teacher holds up object. Child names object, then tells the ending sound. Later progression would be to select appropriate final consonant from among 3 or 4 on a card.

Auditory Memory - The ability to retain and recall auditory information.

Face the child and clap your hands once. Have the child imitate you. Next increase the number of claps. When the child understands and can follow the sequence while facing you, stand behind him and have the child imitate from audition alone. As a further progression, change the rhythm of the claps.

Draw a circle on the blackboard. Clap once to indicate that one figure represents one sound. Next, draw two circles and clap twice. Follow with three and four. Ask the child to look at each series of figures and clap the correct number of times for each set. Then stand behind him and clap a certain number of times; ask him to point to the set of figures corresponding with the number of sounds he hears.

"Words in a series" Select a series of pictures or objects and place them in front of the child. Say the words for him and have him repeat them while looking at the visual cues. Then remove pictures and have him say the series. Series should become progressively longer.

For independent work, tape record a series of words. Give the child a sheet of pictures and ask him to listen to the directions, such as, "I will say the names of some things. On your paper mark the pictures I ask for." The children should then mark the pictures asked for. (Maico Auditory Trainer may be used for this purpose.)

"Say these numbers after me."

2-4

3-5

4-2-7 (To increase the complexity of this activity have the child repeat series of digits, symbols and mixed symbols both forwards and backwards.)

Give a series of instructions. For example, give the child a sheet of páper with pictures and ask him to: color the ball, draw a circle around the dog and put a mark on the cat. (The complexity of this activity can be increased." A series of instructions necessitating physical movement can also be used. For example: "Touch your nose and clap your hands."

Word, phrase and sentence repetition. Gradually increase the number of syllables.

Read sentences and ask questions: "The dog is black." Question - "What color is the dog?" With success the complexity of the sentences and questions can be increased.

With auditory memory work, the time element between immediate and prolonged recall must be gradually increased if permanent retention is going to be the ultimate goal. For example, give a series of commands such as: "Put a mark on the doll, draw a circle on the tree and color in the circle." Then wait thirty seconds and have the child begin the task. This can progress to an extension to the next day's work.

"Categories" For example, "name all the foods you can think of."

"My Grandmother's Trunk" Child says "I packed my grandmother's trunk with_____(apples)." The next child repeats the sentence using the first word and adds a new item. Each child adds a new word after repeating all the previous words.

"Telephone" Pass whispered message from one person to another to see if the message remains the same at the end.

"Make a sound like_____." (Dog, bird, etc.)

APPENDIX

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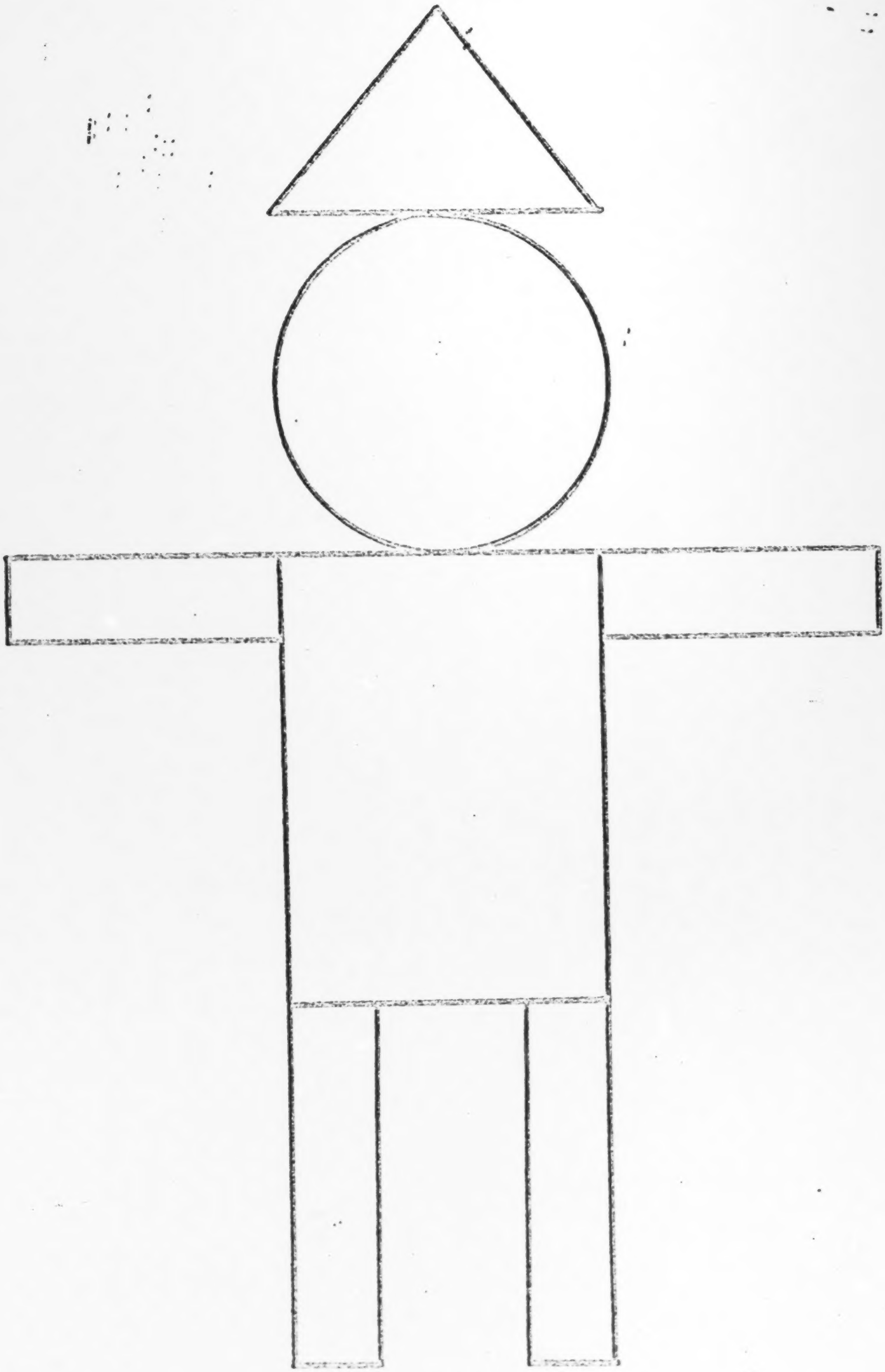


FINGER PLAYS

Five Soldiers

Five little soldiers standing in a row.	Hold up five fingers.
Three stood straight and two stood so.	Thumb and forefinger down,
Along came the captain	other three stand up. Left
And what do you think?	hand forefinger comes march-
Those soldiers jumped up	ing in. Thumb and forefinger
Quick as a wink.	snap up and join others.

Here's A Bunny

Here's a bunny (forefinger and middle finger)
With ears so funny.
And here's a hole in the ground (other arm)
When a noise he hears,
He pricks up his ears,
And jumps in the hole in the ground.
(Two fingers jump into hole made by arm.)

Open Them, Shut Them

Open them, shut them.
Open them, shut them.
Shut them, open them.
Shut them, open them.
Put them in your lap.

Telephone Poles

Two tall telephone poles (index fingers up)
A wire between them strung (middle fingers touch)
Up jumped two little blackbirds (thumbs)
And they swung and swung and swung.

Where is Thumbkin?

Where is thumbkin, where is thumbkin?
Here I am, here I am,
How are you today sir, how are you today sir?
Very well I thank you, very well I thank you,
Run away, run away.
(Repeat, naming each finger successively, pointer, tall man, ring finger, pinky.) When all fingers have been named and "run away", fingers of both hands are wiggeled to the words, "Here we are, here we are."

Two Little Blackbirds

Two little blackbirds sitting on a hill (hold up forefinger of both hands)
One named Jack and one named Jill.
Fly away Jack (Make over-the-shoulder motion with forefinger of right hand)
Fly away Jill (Make over-the-shoulder motion with forefinger of left hand)
Come back Jack. (Bring forefinger of right hand back towards the front)
Come back Jill. (Bring forefinger of left hand back towards the front.)

The Church

Here's the church, (fingers of both hands entwined to make a fist)
Here's the steeple, (forefingers together to make a steeple)
Open the door, (turn hands up to expose all other fingers)
And see all the people. (Wiggle fingers slightly.)

Simon Says

Simon says, thumbs up
Simon says, thumbs down,
Simon says, thumbs wiggle, wiggle, wiggle.

Clapping and Tapping

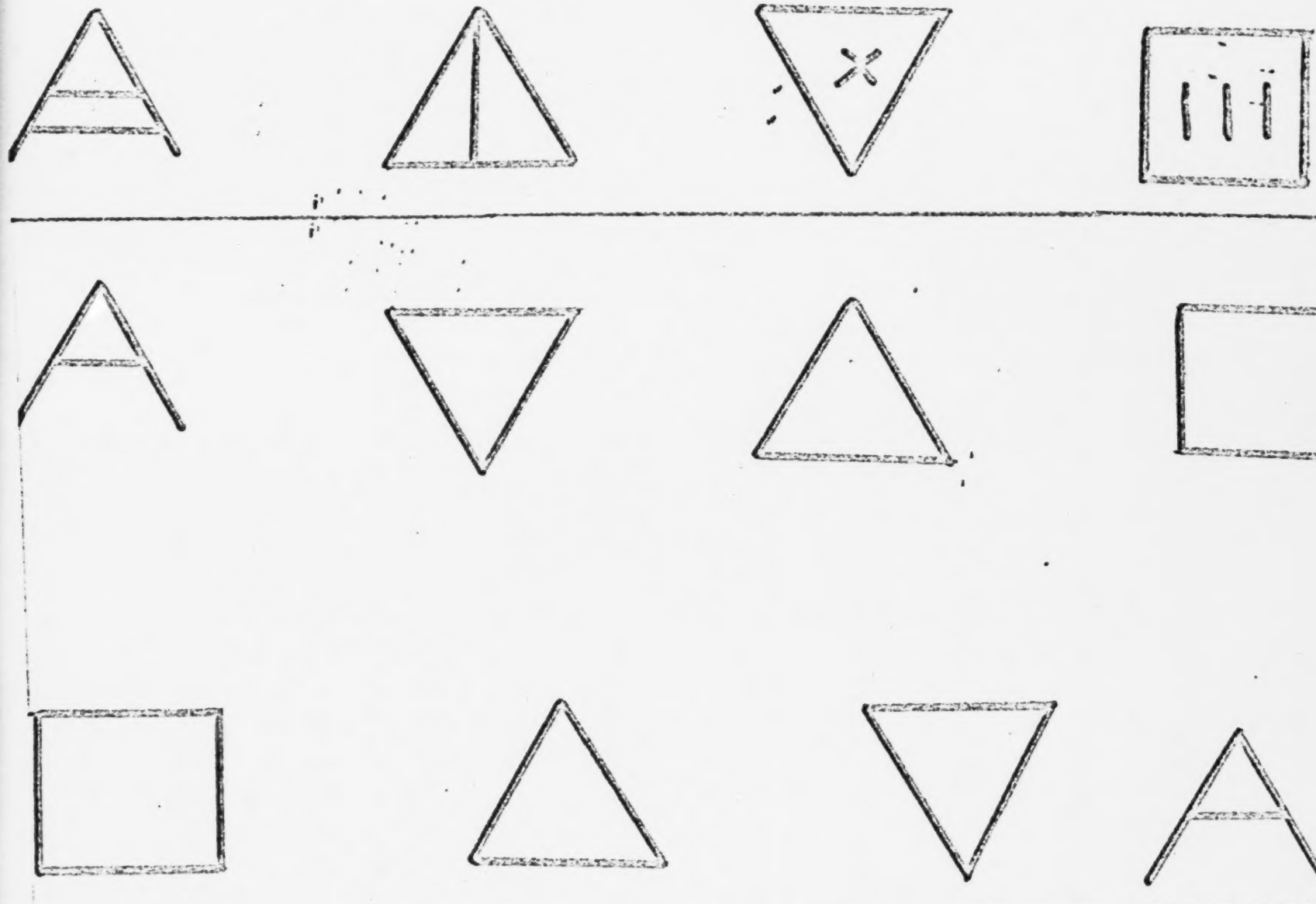
Two little hands go clap, clap, clap.
Two little feet go tap, tap, tap.
A quick little jump up off your chair.
Two little hands fly up in the air.

I Have Ten Little Fingers

I have ten little fingers and they all belong to me.
I can make them do things, would you like to see?
I can shut them up tight
Or open them wide,
I can put them together
Or make them hide.
I can make them jump high.
I can fold them up quietly
And hold them so.

Grandmother's Eyeglasses

Here's grandmother's eyeglasses (thumb and forefinger of each hand together to make glasses)
Here's grandmother's cap (all fingers on top of head to form a cap)
This is the way she folds her hands (hands folded)
And lays them in her lap.



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